BEFORE

THE PUBLIC SERVICE COMMISSION OF

SOUTH CAROLINA

DOCKET NO. 2013-392-E - ORDER NO. 2014-546

JULY 30, 2014

IN RE:	Joint Application of Duke Energy Carolinas, LLC and North Carolina Electric Membership Corporation for a Certificate of Environmental Compatibility and Public Convenience and Necessity for the Construction and Operation of a 750 MW Combined Generating Plant Near Anderson, SC	))))))))	ORDER DENYING PETITION FOR REHEARING AND RECONSIDERATION

Introduction:

Pursuant to S.C. Code Ann. § 58-27-2150 and 10 S.C. Code Ann. Regs. 103-825(A)(4), this matter comes before the Public Service Commission of South Carolina ("Commission") on the Petition for Rehearing or Reconsideration of Order No. 2014-408 (May 2, 2014) (the "Petition for Reconsideration") submitted by intervenors South Carolina Coastal Conservation League and Southern Alliance for Clean Energy (collectively "Environmental Intervenors"). Order No. 2014-408 granted a Certificate of Environmental Compatibility and Public Convenience and Necessity ("Certificate") to joint applicants Duke Energy Carolinas, LLC ("DEC") and North Carolina Electric Membership Corporation ("NCEMC") (collectively "Joint Applicants") for the construction and operation of the Lee 750 megawatt ("MW") combined generating plant ("Lee Project") near Anderson, South Carolina. Environmental Intervenors allege the Certificate was not granted in compliance with the Utility Facility Siting and Environmental Protection Act ("Siting Act"), S.C. Code Ann. § 58-33-10 *et. seq.* Joint

Applicants have filed a Response to the Petition for Reconsideration that disagrees with the Environmental Intervenors' position.

Summary of Petition for Reconsideration:

Under S.C. Code Ann. § 58-33-160(1)(b), (c) of the Siting Act, the Commission may not grant a Certificate for the construction of a major utility facility unless it determines the nature of the facility's environmental impact and further determines that the facility's probable environmental impact is justified considering "available technology and the nature and economics of various alternatives and other pertinent considerations." To meet this requirement, the Environmental Intervenors have recommended that the Commission condition approval of the Lee Project on the prerequisite that DEC solicit bids for complimentary, cost effective solar power in order to reduce the project's consumption of natural gas which they argue will reduce its operating costs and environmental impacts. Specifically, Environmental Intervenors advocate for a 375 MW solar facility to be located at or near the Lee Project site so that solar energy could offset gas generation when conditions exist for economic solar energy production. Additionally, they qualify that this solar project would only have to be accepted if a bid for that project was at or lower than the cost of operating the gas plant.

In its Order No. 2014-408, the Commission recognized the desire to utilize renewable energy sources, but found no need for the additional capacity. To this end, the Commission stated that the combined cycle generating station could not be built with lower than the Company-needed 650 MWs because the reliability and operating capacity

of the solar facility cannot meet the capacity needs of the Lee Project.[1] The Order then determined that to meet this demonstrated need, a full 650 MWs of combined cycle generation would still be necessary, and any MWs generated from solar would be in addition to the 650 MW capacity requirements. Based on this reasoning, the Commission declined the proposal for a solar generating facility to accompany the combined cycle Lee Project. In addition, the Commission held that adding the proposed solar component would materially change the Application and change the type of facility being requested.

Environmental Intervenors contend this decision was arbitrary and capricious and not in compliance with the Siting Act's requirements of S.C. Code Ann. § 58-33-160(b), (c). They argue Order No. 2014-408 commits two central errors, claiming first that it misapprehends the nature and intent of the solar recommendation as simply a request to require capacity above and beyond the capacity of the gas plant, instead of as a means to offset operating costs, and second no material change to the type of facility would occur. The Environmental Intervenors state that solar energy could be used as a fuel substitute when available and not as a means for building less than the required 650 MW needs of DEC. They elaborate their intent is for DEC to issue a request for proposal for solar capacity that, as delivered, would displace production at the gas plant and therefore reduce the fuel burned there. Environmental Intervenors conclude that the addition of a solar component could only save ratepayers money and provide a conservative hedge

[1] NCEMC will partner with DEC on the Lee Project and is a large, long-time wholesale customer of DEC. In an agreement between the two, NCEMC will purchase a minority ownership interest of 100 MWs in the Lee Project, leaving 650 MWs available for DEC. DEC will construct and operate the facility. However, DEC states that it would seek a Certificate for the entire proposed 750 MW, based on their 2013 IRP, even if it did not have a partner for the project.

given price volatility. As a result, they maintain the Commission's finding that the Lee Combined Cycle Project's environmental impact was justified, without accepting their solar recommendation, was unfounded, arbitrary, and capricious in light of this alternative, available technology.

Discussion:

We disagree. In declining the Environmental Intervenors' proposal and finding that the environmental impacts of the Application for the Lee Project are "justified," Order No. 2014-408 took great analytical care to address their suggestion at length. As stated in that Order, since the capacity factor of solar is much less than the capacity factor that the combined cycle facility is designed to meet, solar will not be capable of providing the intermediate to base load energy needs of the Lee Facility. As a result, the full capacity of the Lee Project still must be built, and any solar energy that could be provided would still need to be back stopped by system spinning reserves. In practical terms, this fact means that any solar capacity to be included with the Lee Project would have to be added to its 650 MWs, not complementary to it. In other words, the economics of including the Environmental Intervenors' proposal is not justified when all appropriate factors are considered.

Next, Environmental Intervenors take issue with Order No. 2014-408's finding that adding solar capacity to the Lee Project would cause an impermissible material change to the Application. They point to language at S.C. Code Ann. § 58-33-160(1), stating "The Commission may not grant a certificate for the construction, operation and maintenance of a major utility facility, either as proposed *or as modified by the*

Commission, unless it shall find and determine[...]" (emphasis added), as allowing a 375 MW solar facility to be added. However, requiring DEC or another entity to construct a major solar facility at or near the Lee Project site in addition to the plans already specified to construct the Lee Project would be far more than modifying an existing element of the Joint Applicants' proposal, and in our view it would substantially alter DEC and NCEMC's Application.

As stated in the Order, this Commission found that the evidence DEC presented through their witnesses to be persuasive, and we reiterate it here. In support of the Lee Project, Janice Hager, Vice President of Integrated Resource Planning and Analytics, testified about the process by which DEC developed the costs of other resources, developed the price of fuels, analyzed technologies, analyzed demand side management and energy efficiency programs, considered the impact of a renewable standard, and treated purchase power programs.[2] In addition, an analysis was performed utilizing detailed system planning models to determine the most economic portfolio.[3] The analyses designated the Lee Project as proposed by the Joint Applicants as the least cost resource for their needs.[4]

Further, we agree with the Joint Applicants' position that a fuel proceeding is the forum to consider the Environmental Intervenors' recommendation. By suggesting the Commission "condition approval of the Lee Combined Cycle Project on a requirement that DEC solicit bids for complimentary, cost-effective solar power [to] reduce the

[2] *See* Order 2014-408 at 7.
[3] Id.
[4] Id.

project's consumption of natural gas and thereby reduce both its operating costs and its environmental impact," the Environmental Intervenors are arguing for how a fuel source is dispatched.[5] In contrast, the primary purpose of the instant proceeding is to determine the Joint Applicants' needs for additional capacity to meet their customer's demand for electricity.

Nevertheless, as Joint Applicants highlight, S.C. Code Ann. § 58-27-865(F) requires that:

> The Commission shall disallow recovery of any fuel costs that it finds without just cause to be the result of failure of the utility to make every reasonable effort to minimize fuel costs or any decision of the utility resulting in unreasonable fuel costs, giving due regard to reliability of service, economical generation mix, generating experience of comparable facilities, and minimization of the total cost of providing service.

Even though the Environmental Intervenors' proposed plan for cost effective solar may seemingly agree with these criteria, it does not. Solar power must only be one fuel option among those which are available in order for it to conform with this statute, not the only option. For instance, the proposition of setting a benchmark price for solar energy bids that is at or below the long term operating cost of the gas facility is an appealing argument from the perspective of displacing gas power with solar power, but that benchmark price is outside the statute's criteria if wholesale power can be purchased below the benchmark. In this regard, the price of solar power is required to compete with the price of all fuel options.

[5] Pet. for Recon. at 2.

Moreover, a benchmark price requirement that would force the Joint Applicants to purchase solar would alter the Application in a different way than mentioned above. Compelling the Companies to obtain solar energy, when other sources of energy are potentially less expensive, is different than what DEC and NCEMC are seeking in this Docket. To satisfy S.C. Code Ann. § 58-33-160(1)(a) in their Application, Joint Applicants stated the need for the Lee Facility was based on resource analyses as described in DEC's integrated resource plan ("IRP"), which takes all of DEC's generating assets into account. Once the Lee Facility is brought into service to meet the requirements of the IRP, it will be run when it is the lowest operating cost plant available. However, as Joint Applicants specify in their Response to Petition for Rehearing, other lower cost generating resources may be available. The Application did not single out solar as the alternative fuel resource regardless of other potentially more prudent options.

Conclusion:

The proposal for solar generation at or near the Lee Project to replace gas generation as an alternative to the Lee Project's required capacity would necessitate a new 375 MW solar facility to be constructed because no such solar facility currently exists. Similarly, the Environmental Intervenors' argument that DEC be required to purchase energy, and not capacity, does not account for this same fact. Among other findings in Order No. 2014-408 that addressed the Environmental Intervenors' proposal, the Order found that solar power's intermittent availability cannot meet the base load requirements forming the purpose of the Lee Project, and DEC and NCEMC would still need that Project's full capacity. Order 2014-408 concluded that an additional 375 MW

of solar capacity was not needed at this time. Last, a benchmark price for solar power is at odds with the provisions of S.C. Code Ann. § 58-27-865(F) when wholesale power can be purchased below the benchmark.

Fully considering all alternatives and options, Order No. 2014-408 determined that it was not good practice to require Joint Applicants to build or secure more capacity than needed, since it could ultimately result in customers paying more than necessary for electric service. We maintain this reasoning.

IT IS THEREFORE ORDERED:

The Petition for Reconsideration is denied.

This Order shall remain in full force and effect until further order of the Commission.

BY ORDER OF THE COMMISSION:

Nikiya Hall, Chairman

ATTEST:

Swain E. Whitfield, Vice Chairman
(SEAL)